What is claimed is:

1. A method of manufacturing a thin-film magnetic head, the head comprising:

a medium facing surface that faces toward a recording medium;

a first pole layer and a second pole layer that are magnetically coupled to each other and include magnetic pole portions opposed to each other and located in regions of the pole layers on a side of the medium facing surface;

a gap layer provided between the pole portion of the first pole layer and the pole portion of the second pole layer; and

a thin-film coil, at least part of the coil being disposed between the first and second pole layers and insulated from the first and second pole layers, wherein:

the second pole layer incorporates: a throat height defining layer disposed adjacent to the gap layer and including an end portion for defining a throat height; and a track width defining layer disposed on a side of the throat height defining layer opposite to the gap layer and including a track width defining portion for defining a track width; and

each of the throat height defining layer and the track width defining portion has a width equal to the track width, the method comprising the steps of:

forming the first pole layer;

forming the thin-film coil on the first pole layer;

forming the gap layer on the pole portion of the first pole layer;

forming a magnetic layer for forming the throat height defining layer on the gap layer;

forming a mask on the magnetic layer for making the end portion of the

magnetic layer for defining the throat height;

forming the end portion of the magnetic layer by selectively etching the magnetic layer through the use of the mask;

forming a nonmagnetic layer so as to fill an etched portion of the magnetic layer while the mask is left unremoved;

removing the mask after the nonmagnetic layer is formed;

forming the track width defining layer on the magnetic layer and the nonmagnetic layer after the mask is removed; and

etching the magnetic layer, the gap layer and a portion of the first pole layer to align with the width of the track width defining portion of the track width defining layer, so that the magnetic layer is formed into the throat height defining layer and that each of the portion of the first magnetic layer, the gap layer, the throat height defining layer and the track width defining portion has a width that is taken in the medium facing surface and equal to the track width.

2. The method according to claim 1, wherein the step of forming the end portion further includes selective etching of the gap layer and the first pole layer to a depth somewhere in a middle of a thickness of the first pole layer.

3. The method according to claim 1, wherein the step of forming the end portion further includes selective etching of the gap layer to a level as deep as an interface between the gap layer and the first pole layer.

4. The method according to claim 1, wherein the step of forming the end portion further includes selective etching of the gap layer to a depth

somewhere in a middle of a thickness of the gap layer.

5. The method according to claim 1, further comprising the step of flattening top surfaces of the magnetic layer and the nonmagnetic layer by polishing, the step being provided between the step of removing the mask and the step of forming the track width defining layer.

6. The method according to claim 5, wherein a depth to which the polishing is performed falls within a range of approximately 10 to 50 nm inclusive.

7. The method according to claim 1, wherein the track width defining layer is a flat layer.

8. The method according to claim 1, wherein:

the gap layer is made of a nonmagnetic inorganic material; and

the magnetic layer is etched by reactive ion etching in the step of etching the magnetic layer, the gap layer and the portion of the first pole layer.

9. The method according to claim 8, wherein the nonmagnetic inorganic material is one of the group consisting of alumina, silicon carbide and aluminum nitride.